

DOCUMENTATION FOR WASTE CALC

INTRODUCTION

This documentation is a supplement to the waste composition model (WasteCalc) and report, *WasteCalc: An Advanced Waste Composition Model*, prepared by Kessler Consulting, Inc., and Franklin Associates, Ltd., under Innovative Grant #IG00-07 from the Florida Department of Environmental Protection (DEP) to Pinellas County. This descriptive text describes the attached Excel® spreadsheets (on CD ROM), which document the calculations underlying WasteCalc.

NOTICE

Some of the methodologies described here were developed by Franklin Associates, Ltd. exclusively for prior projects funded by other sponsors. They are being provided to Florida DEP for its own use, but are not intended for public distribution or publication.

The Excel spreadsheets were converted into a web site program by Village Data Services under contract to Franklin Associates, Ltd. The program was written for ease of making later changes and additions, if desired, by DEP. Instructions for updating the ASP model program are included within the program itself.

FACTORS WORKSHEET

The key spreadsheet for the model is labeled “Factors Worksheet” (Table 1). All Florida counties are arrayed in decreasing order of population density (in persons per square mile). The DEP material categories are arrayed across the top of the table. Above each material category is the U.S. average generation in pounds per person per year. These numbers were derived from a draft report for the U.S. Environmental Protection Agency (EPA), with the EPA categories regrouped into Florida categories. (This is explained further in the grant report.)

For the following materials, the model adjusts to Florida conditions using factors based on sampling studies and previous reports to DEP by each county:

Glass	Other plastics
Aluminum cans	Office paper
Plastic bottles	Other paper
Steel cans	Food wastes
Yard trash	Textiles

Because the counties vary so widely in their reported waste composition, it was not possible to develop an algorithm that would automatically convert sampling results to reasonable adjustment factors for every county. Therefore, an element of “best professional judgment” was involved in developing factors that would adapt to every

Florida county while staying as consistent as possible with the entire series. In the future, if DEP wants to make changes to a county based on a recent sampling study, the data would need to be scrutinized and any model changes would need to be tested.

For the materials listed above, the web site model multiplies the factor for each material within each county times the U.S. average generation shown at the top of the spreadsheet. The connection between the Florida county factors and the U.S. per capita average allows the DEP to update the model using more recent editions of the EPA report, *Characterization of Municipal Solid Waste in the United States*, as described in Appendix C of the grant report.

NEWSPAPERS (ONP)

The algorithms (Excel spreadsheets) for calculating newspaper generation in each Florida county are shown as Table 2 and Table 3. (Because of the large number of counties to calculate, they were divided into two Excel workbooks, with multiple worksheets in each. Two data sources are needed for the update: “Circulation,” an annual statistical source published by SRDS; and “Editor & Publisher,” an annual statistical source published by Editor & Publisher. The methodology is as follows:

1. The worksheet “data tbl” (in Tables 2 and 3) lists all newspapers circulated in Florida (for which data are available), whether or not they are published in Florida. Enter total circulation (from “Editor & Publisher”) for each paper. (Note that care must be taken to account for daily and Sunday circulation. The equations underlying each cell will give guidance on this.)
2. Enter total newsprint purchases for each paper (also from “Editor & Publisher”). Data will not be available for a few papers; in that case, tonnage must be estimated using newspapers of similar size and circulation as a guide.
3. The data spreadsheet then automatically calculates pounds per issue for each newspaper, accounting for ink, pressroom scrap, inserts (e.g., Sunday magazines), and overissue (unsold papers generally returned to the publisher, then recycled).
4. Complete calculations for each county. (Table 2 has counties with initials from A to J; Table 3 has counties with initials from J to W.) The column “Average weight” is linked to the data table. Enter annual circulation data for newspapers circulated in the county (whether or not published in the county) – obtained from “Circulation.” The worksheet then calculates generation of newspapers (ONP), including making an adjustment for weekly or other local papers.
5. The results from this spreadsheet must be entered into an Access database, “ONP-OCC moisture adjustment,” which is part of the website model. As described in the final grant report, the model adjusts as-generated ONP and OCC weights to weights in an “as-disposed” condition using Florida-specific factors (Table 4).

CORRUGATED BOXES (OCC)

The algorithms for calculating corrugated box (OCC) generation in each Florida county are shown as Table 5. The “Model Maintenance” section of the website model provides for updating the corrugated generation for each county assuming that it grew (or declined) in the same proportion as average U.S. generation.

The OCC calculations for each Florida county are based on employment in SIC categories selected because they generate large amounts of corrugated and/or are important categories in Florida (e.g., lodging and recreation). At the time the model was developed, 1998 was the last year for which data were available in *Florida Statistical Abstract 1999* (Tables 6.05, 19.73, 19.76, 19.78). Since OCC generation did not change much nationally between 1998 and 2000, the 1998 data were used as a surrogate for 2000.

When more recent employment data become available, Table 5 can be updated for each county, as follows:

1. Enter total Florida corrugated generation as reported in the annual DEP report.
2. Enter SIC employment for each county in each category. The spreadsheet will calculate corrugated generation in those categories using factors (in pounds per employee per day) developed by Franklin Associates, Ltd., based on various industry-specific sampling studies.
3. Enter total employment for each county (Table 6.05). The spreadsheet will calculate an “Other” employment category.
4. The spreadsheet will sum employment in all the counties. It may be necessary to manually adjust the “Other” corrugated generation factor so that the total matches the total reported by DEP. This factor is then used to complete the corrugated generation calculation for each county.
5. The results from this spreadsheet must be entered into an Access database, “ONP-OCC moisture adjustment,” which is part of the website model. (See description above for ONP (Table 4).

The calculation outlined above ensures that the state-reported total corrugated generation is allocated to the counties based on their employment in the most relevant categories.

CONSTRUCTION & DEMOLITION DEBRIS

The construction and demolition debris factors were developed from historical data. The factors shown in Table 6 are tied to county population in the model. As county populations change, the estimated quantity of C&D debris will change. Table 6 can only be updated when new information becomes available to DEP.

UPDATING THE MODEL

Updating National Average Factors

The “Model Maintenance” section of the web site model provides for updating the U.S. average generation factors for all materials except construction & demolition debris using the most recent version of EPA’s report, *Characterization of Municipal Solid Waste in the United States* (see Table 7). This part of the model is designed to provide an easy, inexpensive update of trends on a national level that affect MSW generation. Factors, such as the effects of recessions or changing consumer habits, e.g., changes in beverage packaging, are reflected. Thus, updates can be made on an interim basis until more time-consuming updates reflecting Florida-specific factors can be made.

By updating this page, the parts of the model that use this information also will be updated. Detailed instructions for this update are included in Appendix C to the grant report, *WasteCalc: An Advanced Waste Composition Model*. As described earlier, the update permits adjustments to the Florida MSW categories.

Updating Construction & Demolition Debris Factors

Construction & demolition debris factors can be updated as new Florida-specific data become available to DEP. Until new data are available, the model updates county estimates based on population.

Table 1 - FACTORS WORKSHEET

U.S. 2000 (lb/person/year)

107

79.5

11.2

25.5

18.8

197.1

25.9

33.2

COUNTY	(Census) Population 4/1 2000	Population per sq mi. Density	Moisture-Adj. ONP Tons	Glass		Aluminum Cans		Plastic Bottles		Steel cans		Yard waste		White goods		Tires		Other Factor
				Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons	
Pinellas	921,482	3,289	94,373	1.031	37,782	1.350	6,968	1.717	20,168	1.397	12,097	1.372	124,630	11,933	15,297	1,364		
Broward	1,623,018	1,343	154,663	1.000	64,515	1.700	15,451	1.700	35,179	1.300	19,833	1.800	287,907	21,018	26,942	1,300		
Seminole	365,196	1,185	26,614	1.000	14,517	1.700	3,477	1.700	7,916	1.300	4,463	1.800	64,782	4,729	6,062	1,300		
Miami-Dade	2,253,362	1,159	273,147	1.000	89,571	1.700	21,452	1.700	48,842	1.300	27,536	1.800	399,724	29,181	37,406	1,300		
Duval	778,879	1,006	35,125	1.000	30,960	1.700	7,415	1.700	16,882	1.300	9,518	1.800	138,165	10,086	12,929	1,300		
Orange	896,344	988	61,608	1.000	35,630	1.700	8,533	1.700	19,428	1.300	10,953	1.800	159,002	11,608	14,879	1,300		
Hillsborough	998,948	951	80,595	1.000	39,708	1.700	9,510	1.700	21,652	1.300	12,207	1.800	177,203	12,936	16,583	1,300		
Palm Beach	1,131,184	573	105,229	1.000	44,965	1.600	10,135	1.600	23,076	1.300	13,823	1.600	178,365	14,649	18,778	1,200		
Sarasota	325,957	570	24,578	1.500	19,435	2.000	3,651	1.609	6,686	1.387	4,250	2.000	64,246	4,221	5,411	1,364		
Lee	440,888	549	36,829	1.689	29,607	2.062	5,092	1.509	8,483	1.076	4,459	2.419	105,104	5,709	7,319	0,480		
Brevard	476,230	468	31,118	1.000	18,930	1.600	4,267	1.600	9,715	1.300	5,820	1.600	75,092	6,167	7,905	1,200		
Pasco	344,765	463	31,438	1.000	13,704	1.600	3,089	1.600	7,033	1.300	4,213	1.600	54,363	4,465	5,723	1,200		
Escambia	294,410	444	8,949	1.000	11,703	1.600	2,638	1.600	6,006	1.300	3,598	1.600	46,423	3,813	4,887	1,200		
Volusia	443,343	401	33,998	1.000	17,623	1.600	3,972	1.600	9,044	1.300	5,418	1.600	69,906	5,741	7,359	1,200		
Leon	239,452	359	11,606	1.000	9,518	1.600	2,145	1.600	4,885	1.300	2,926	1.600	37,757	3,101	3,975	1,200		
Manatee	264,002	356	16,973	1.000	10,494	1.600	2,365	1.600	5,386	1.300	3,226	1.600	41,628	3,419	4,382	1,200		
St. Lucie	192,695	337	11,107	1.000	7,660	1.400	1,511	1.500	3,685	1.300	2,355	1.500	28,485	2,495	3,199	1,200		
Hernando	130,802	274	13,165	1.000	5,199	1.400	1,025	1.500	2,502	1.300	1,598	1.500	19,336	1,694	2,171	1,200		
Polk	483,924	258	35,597	1.000	19,236	1.400	3,794	1.500	9,255	1.300	5,914	1.500	71,536	6,267	8,033	1,200		
Alachua	217,955	249	12,401	0.700	6,065	1.400	1,709	1.400	3,890	1.300	2,663	1.500	32,219	2,823	3,618	1,200		
Clay	140,814	234	5,228	1.000	5,597	1.400	1,104	1.500	2,693	1.300	1,721	1.500	20,816	1,824	2,338	1,200		
Martin	126,731	228	12,744	1.000	5,038	1.400	994	1.500	2,424	1.300	1,549	1.500	18,734	1,641	2,104	1,200		
Indian River	112,947	224	8,260	0.903	4,054	1.356	858	1.687	2,430	1.650	1,752	5.940	66,118	1,463	1,875	1,154		
Lake	210,528	221	21,907	0.908	7,600	1.400	1,651	1.500	4,026	1.300	2,573	1.500	31,121	2,726	3,495	1,200		
Charlotte	141,627	204	10,223	1.042	5,868	2.281	1,809	1.425	2,574	1.703	2,268	0.165	2,303	1,834	2,351	1,218		
Citrus	118,085	202	7,566	0.779	3,657	1.695	1,121	1.058	1,594	0.952	1,057	3.365	39,159	1,529	1,960	0,938		
St. Johns	123,135	202	5,449	0.908	4,445	1.400	965	1.500	2,355	1.300	1,505	1.500	18,202	1,595	2,044	1,200		
Bay	148,217	194	6,793	0.932	5,493	1.400	1,162	1.500	2,835	1.300	1,811	1.500	21,910	1,919	2,460	1,200		
Okaloosa	170,498	182	4,493	0.778	5,274	1.564	1,493	1.219	2,650	1.174	1,882	1.750	29,405	2,208	2,830	1,240		
Marion	258,916	164	12,577	1.087	11,184	1.371	1,987	1.843	6,085	3.290	8,008	1.465	37,381	3,353	4,298	1,810		
Osceola	172,493	131	9,605	0.900	6,171	1.300	1,256	1.500	3,299	1.300	2,108	1.500	25,499	2,234	2,863	1,200		
Collier	251,377	124	14,007	0.900	8,993	1.300	1,830	1.500	4,808	1.300	3,072	1.500	37,160	3,255	4,173	1,200		
Santa Rosa	117,743	116	3,092	0.900	4,212	1.300	857	1.500	2,252	1.300	1,439	1.500	17,405	1,525	1,955	1,200		
Flagler	49,832	103	2,631	0.900	1,783	1.300	363	1.500	953	1.300	609	1.500	7,366	645	827	1,200		
Sumter	53,345	98	2,638	0.733	1,554	0.440	132	2.368	1,611	2.184	1,095	0.890	4,679	691	886	0,670		
Putnam	70,423	98	2,596	0.900	2,519	1.300	513	1.500	1,347	1.300	861	1.000	6,940	912	1,169	1,000		
Bradford	26,088	89	747	0.900	933	1.300	190	1.500	499	1.300	319	1.000	2,571	338	433	1,000		
Nassau	57,663	89	1,948	0.900	2,063	1.300	420	1.500	1,103	1.300	705	1.000	5,683	747	957	1,000		

COUNTY	(Census) Population 4/1 2000	Population per sq mi. Density	Moisture-Adj. ONP Tons	Glass		Aluminum Cans		Plastic Bottles		Steel cans		Yard waste		White goods Tons	Tires Tons	Other Factor
				Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons			
Gadsden	45,087	87	1,307	0.700	1,255	1.000	252	1.300	747	1.000	424	1.000	4,443	584	748	0.800
Highlands	87,366	85	6,187	0.565	1,960	1.310	641	1.478	1,646	1.693	1,390	0.907	7,809	1,131	1,450	1.329
Monroe	79,589	80	4,326	3.216	10,173	3.729	1,662	2.389	2,425	2.455	1,836	3.557	27,899	1,031	1,321	1.458
Columbia	56,513	71	1,838	0.700	1,572	1.000	316	1.300	937	1.000	531	0.750	4,177	732	938	0.800
Union	13,442	56	330	0.700	374	1.000	75	1.300	223	1.000	126	0.750	994	174	223	0.800
Jackson	46,755	51	655	0.700	1,301	1.000	262	1.300	775	1.000	439	0.750	3,456	605	776	0.800
Suwannee	34,844	51	765	0.700	970	1.000	195	1.300	578	1.000	328	0.750	2,575	451	578	0.800
De Soto	32,209	51	1,158	0.700	896	1.000	180	1.300	534	1.000	303	0.500	1,587	417	535	0.800
Okeechobee	35,910	46	1,826	0.700	999	1.000	201	1.300	595	1.000	338	0.750	2,654	465	596	0.800
Hardee	26,938	42	856	0.700	750	1.000	151	1.300	446	1.000	253	0.750	1,991	349	447	0.800
Gilchrist	14,437	41	404	0.700	402	1.000	81	1.300	239	1.000	136	0.500	711	187	240	0.800
Holmes	18,564	39	121	0.500	369	1.000	104	1.000	237	1.000	175	0.500	915	240	308	0.500
Walton	40,601	38	585	0.700	1,130	1.000	227	1.300	673	1.000	382	0.750	3,001	526	674	0.800
Baker	22,259	38	470	0.700	619	1.000	125	1.300	369	1.000	209	1.000	2,194	288	369	0.800
Wakulla	22,863	38	537	0.500	454	1.000	128	1.000	292	1.000	215	0.750	1,690	296	380	0.500
Washington	20,973	36	364	0.700	584	1.000	117	1.300	348	1.000	197	0.500	1,033	272	348	0.800
Hendry	36,210	31	1,083	0.227	327	1.000	203	1.200	554	1.000	340	0.500	1,784	469	601	0.800
Levy	34,450	31	1,232	1.120	1,533	1.389	268	1.593	700	1.481	480	0.211	716	446	572	1.066
Madison	18,733	27	202	0.500	372	1.000	105	1.200	287	1.200	211	0.500	923	243	311	0.700
Hamilton	13,327	26	202	0.500	265	1.000	75	1.200	204	1.200	150	0.500	657	173	221	0.700
Gulf	13,332	24	349	0.500	265	1.000	75	1.200	204	1.200	150	0.500	657	173	221	0.700
Calhoun	13,017	23	185	0.500	259	1.000	73	1.200	199	1.200	147	0.300	385	169	216	0.500
Jefferson	12,902	22	316	0.500	256	1.000	72	1.200	197	1.200	146	0.500	636	167	214	0.700
Franklin	11,057	21	300	0.500	220	1.000	62	1.200	169	1.200	125	0.500	545	143	184	0.700
Dixie	13,827	20	402	0.400	220	0.800	62	0.900	159	0.900	117	0.400	545	179	230	0.500
Taylor	19,256	19	260	0.200	153	0.750	81	0.500	123	0.600	109	0.300	569	249	320	0.400
Glades	10,576	14	16	0.400	168	0.800	47	0.900	121	0.900	89	0.400	417	137	176	0.500
Lafayette	7,022	13	109	0.400	112	0.800	31	0.900	81	0.900	59	0.200	138	91	117	0.500
Liberty	7,021	8	122	0.400	112	0.800	31	0.900	81	0.900	59	0.400	277	91	117	0.500
FL Totals	15,982,378	296	1,258,160		641,330		142,807		329,390		200,666		2,643,706	206,972	265,307	
Florida per capita			157.4		80.3		17.9		41.2		25.1		330.8	25.9	33.2	

ONP and OCC from moisture-adjusted worksheet.
White goods and tires are FAL factors.
Fe and non-fe recycle: 1995 except for sample counties.
Fe and non-fe calculated tonnage is moisture-adjusted.

Plastics Tons	Ferrous metals			Non-ferrous metals			Moisture- Adj. OCC Tons	Office paper		Other paper		Food wastes		Textiles	
	Recycle	Factor	Total	Recycle	Factor	Total		Factor	Tons	Factor	Tons	Factor	Tons	Factor	Tons
2,366	431	0.800	1,053	244	0.800	415	3,644	0.500	603	0.600	3,261	0.700	2,905	0.800	878
7,618	1,800	0.970	3,261	163	0.883	529	9,835	0.618	1,444	1.277	13,450	0.728	5,855	1.656	3,522
7,611	415	0.791	1,500	21	1.473	578	18,182	0.485	1,032	1.369	13,139	2.248	16,469	1.375	2,664
2,966	11,844	0.800	12,624	850	0.800	1,065	7,484	0.500	756	0.600	4,088	0.700	3,641	0.800	1,101
705	433	0.800	618	16	0.800	67	536	0.500	180	0.600	972	0.700	866	0.800	262
2,454	346	0.800	991	71	0.800	249	4,499	0.500	625	0.600	3,382	0.700	3,013	0.800	911
1,829	6,047	0.800	6,528	413	0.800	545	3,686	0.500	466	0.600	2,520	0.700	2,245	0.800	679
1,690	469	0.800	913	27	0.800	149	2,670	0.500	431	0.600	2,330	0.500	1,482	0.500	392
1,885	2,657	0.800	3,153	1,093	0.800	1,229	4,218	0.500	480	0.600	2,597	0.700	2,314	0.800	700
1,414	1,089	0.800	1,461	60	0.800	162	2,236	0.500	360	0.600	1,948	0.700	1,736	0.800	525
758	208	0.800	407	62	0.800	117	600	0.500	193	0.600	1,044	0.700	930	0.800	281
609	500	0.500	660	21	0.800	92	972	0.500	248	0.250	559	0.600	1,025	0.500	226
2,131	2,105	0.800	2,665	128	0.800	282	4,087	0.500	543	0.600	2,937	0.700	2,616	0.800	791
1,168	234	0.800	541	18	0.800	103	1,576	0.500	298	0.600	1,610	0.700	1,434	0.800	434
750	567	0.500	764	59	0.500	113	1,283	0.300	183	0.250	689	0.600	1,263	0.500	278
1,101	13	0.800	302	57	0.800	137	1,774	0.500	281	0.600	1,517	0.700	1,351	0.800	409
1,900	131	0.169	236	0	1.000	172	4,514	0.738	715	0.500	2,183	0.615	2,050	0.842	743
2,408	1,228	0.300	1,407	62	0.526	148	2,976	0.627	578	0.500	2,076	0.787	2,496	0.913	766
860	779	0.300	876	49	0.500	93	1,800	0.300	150	0.500	1,129	0.600	1,035	0.700	319
612	453	0.300	522	3	0.500	35	970	0.300	107	0.500	803	0.500	613	0.700	227
612	247	0.300	316	23	0.500	55	968	0.300	107	0.500	804	0.600	736	0.700	227
427	189	0.300	256	0	0.500	31	1,168	0.300	104	0.500	785	0.500	599	0.700	222
592	401	0.300	468	4	0.500	35	887	0.300	104	0.500	778	0.600	713	0.700	220
508	562	0.300	619	32	0.500	58	1,153	0.300	89	0.500	666	0.600	611	0.700	188
454	313	0.250	373	13	0.250	29	758	0.200	74	0.250	417	0.500	636	0.500	168
505	2,652	0.250	2,735	449	0.250	472	2,261	0.200	103	0.200	464	0.200	355	0.200	94
347	542	0.250	588	3	0.250	16	357	0.200	57	0.250	319	0.500	487	5.000	1,288
230	27	0.250	57	0	0.250	8	366	0.200	38	0.250	212	0.500	323	0.500	85
230	54	0.250	84	0	0.250	8	319	0.200	38	0.250	212	0.500	323	0.500	85
1,283,860	1,104,011	56.291	1,386,950	195,806	59.906	270,543	2,609,269	548,934	68.7	2,058,235	1,582,108	1,043	567,223	198.0	710
160.7			173.6	33.9	326.5	339	326.5	68.7	257.6	198.0	710				

Table 1 (Model)

Subtotal Tons	C&D debris		Total Ex. Misc.		County- Entered		Misc. Tons
	Factor	Tons	Tons	Tons	Tons	Tons	
1,020,158	534	245,954	1,266,112	1,339,272	73,160		
1,654,736	834	677,160	2,331,896	2,375,988	44,092		
356,287	658	120,090	476,377	563,057	86,680		
2,462,077	737	830,440	3,292,517	3,761,745	469,228		
884,496	1,080	420,580	1,305,076	1,406,039	100,963		
1,055,002	1,361	609,910	1,664,912	2,079,123	414,211		
1,251,641	848	423,460	1,675,101	2,306,956	631,855		
1,077,943	1,110	627,920	1,705,863	1,712,502	6,639		
384,419	1,253	204,220	588,639	609,405	20,766		
421,548	285	62,930	484,478	630,930	146,452		
432,728	368	87,610	520,338	731,345	211,007		
313,737	702	120,940	434,677	598,354	163,677		
276,056	1,022	150,510	426,566	496,738	70,172		
415,803	1,014	224,780	640,583	826,056	185,473		
211,696	1,087	130,190	341,886	375,058	33,173		
237,998	768	101,350	339,348	525,173	185,825		
165,244	630	60,740	225,984	229,874	3,890		
110,594	431	28,180	138,774	166,870	28,096		
478,296	844	204,300	682,596	1,183,549	500,954		
187,337	594	64,710	252,047	259,228	7,181		
109,830	259	18,220	128,050	129,836	1,786		
112,929	880	55,770	168,699	214,133	45,434		
150,517	933	52,690	203,207	231,640	28,433		
188,507	461	48,520	237,027	349,752	112,724		
97,307	674	47,740	145,047	151,581	6,534		
113,245	1,083	63,940	177,185	235,977	58,792		
101,785	895	55,130	156,915	274,929	118,014		
143,319	970	71,890	215,209	223,322	8,113		
152,282	775	66,040	218,322	219,912	1,590		
271,660	212	27,410	299,070	305,083	6,013		
140,135	486	41,940	182,075	292,568	110,493		
211,266	823	103,500	314,766	513,830	199,064		
90,439	795	46,810	137,249	206,113	68,864		
37,598	786	19,590	57,188	79,761	22,573		
33,058	611	16,290	49,348	50,573	1,225		
61,372	557	19,630	81,002	92,140	11,139		
17,575	110	1,440	19,015	21,464	2,449		
39,859	313	9,010	48,869	57,504	8,634		

Subtotal Tons	C&D debris		Total Ex. Misc.		County- Entered Total Tons	Misc. Tons
	Factor	Tons	Ex. Misc.	Tons		
24,887	33	750	25,637	32,075	6,438	
67,730	424	18,530	86,260	96,938	10,678	
111,850	432	17,180	129,030	136,422	7,392	
44,766	447	12,630	57,396	77,916	20,520	
6,726	156	1,050	7,776	11,217	3,441	
24,349	174	4,070	28,419	33,897	5,478	
24,937	222	3,870	28,807	50,643	21,836	
15,669	191	3,080	18,749	20,493	1,744	
24,249	627	11,260	35,509	117,061	81,552	
15,085	125	1,680	16,765	19,143	2,378	
6,730	48	350	7,080	7,883	803	
6,861	52	480	7,341	7,954	613	
23,249	980	19,890	43,139	105,536	62,397	
11,807	83	920	12,727	18,179	5,452	
9,315	92	1,055	10,370	11,536	1,165	
10,134	90	940	11,074	13,376	2,302	
17,874	331	6,000	23,874	24,201	327	
18,802	134	2,310	21,112	22,491	1,379	
8,996	180	1,690	10,686	17,650	6,964	
5,836	71	470	6,306	6,534	228	
5,918	663	4,420	10,338	18,230	7,892	
5,224	75	490	5,714	6,241	527	
5,801	167	1,080	6,881	10,306	3,425	
5,639	1,006	5,560	11,199	12,659	1,460	
4,822	401	2,770	7,592	8,541	949	
8,852	116	1,113	9,965	10,015	50	
4,629	104	550	5,179	7,582	2,403	
2,057	74	260	2,317	2,376	59	
2,189	219	770	2,959	3,887	928	
15,995,461		6,286,752	22282212.57	26,738,360	4,456,147	
		786.7			557.6	

Data Table
CALCULATION OF WEIGHT OF NEWSPAPERS IN FLORIDA, 2000

Enter data into columns E and G.
 Table will update automatically.

Newspaper	U.S. Weekly Circulation (Total Issues) (1)	Daily newspapers							Overissue daily newspapers (9) tons	Pounds/ Issue (10) lbs
		Newsprint consumption (purchases) (2) tons	Adjust- ment for ink (3) tons	Adjust- ment for pressroom scrap (4) tons	Adjusted newsprint consumption (5) tons	Inserts on newsprint (6) tons	Inserts on groundwood newspapers (7) tons	Total daily newspapers (8) tons		
Atlanta Journal, Constitution	2,953,589	128,250	1,283	3,886	125,647	15,505	28,087	169,239	8,462	2.09
Boca Raton News	96,377	3,162	32	96	3,097	362	692	4,172	209	1.58
Boston Globe	3,499,089	130,000	1,300	3,939	127,361	15,717	28,470	171,548	8,577	1.79
Boston Herald	1,651,980	49,613	496	1,503	48,605	5,998	10,865	65,469	3,273	1.45
Bradenton Herald	310,450	6,129	61	186	6,005	741	1,342	8,088	404	0.95
Brooksville Hernando Today (FL)	113,113	848	8	26	831	103	186	1,119	56	0.36
Cape Coral Breeze (FL)	11,130	210	2	6	206	25	46	277	14	0.91
Charlotte Harbor Sun-Herald	241,323	4,000	40	121	3,919	484	876	5,278	264	0.80
Chicago Sun-Times	3,060,184	126,730	1,267	3,840	124,157	15,322	27,754	167,233	8,362	2.00
Chicago Tribune	4,659,784	220,400	2,204	6,678	215,926	26,646	48,268	290,840	14,542	2.28
Crystal River Citrus County Chronicle	173,288	1,200	12	36	1,176	145	263	1,584	79	0.33
Daytona Beach News-Journal	720,683	15,598	156	473	15,281	1,886	3,416	20,583	1,029	1.04
Fort Lauderdale Sun-Sentinel	1,910,019	88,756	888	2,689	86,954	10,731	19,438	117,122	5,856	2.24
Fort Myers News-Press	633,107	22,060	221	668	21,612	2,667	4,831	29,110	1,456	1.68
Fort Pierce/Port St. Lucie Tribune	192,998	2,965	30	90	2,905	359	649	3,913	196	0.74
Fort Walton Beach Northwest Florida News	281,112	3,000	30	91	2,939	363	657	3,959	198	0.51
Gainesville Sun (FL)	370,040	9,414	94	285	9,223	1,138	2,062	12,423	621	1.23
Jacksonville Times Union (FL)	1,270,513	32,322	323	979	31,666	3,908	7,079	42,653	2,133	1.23
Key West Citizen	61,129	399	4	12	391	48	87	527	26	0.31
Lake City Reporter	49,490	484	5	15	474	58	106	638	32	0.47
Lakeland Ledger	536,731	16,332	163	495	16,001	1,975	3,577	21,552	1,078	1.47
Leesburg Commercial	206,081	3,780	38	115	3,703	457	828	4,988	249	0.88
Los Angeles Times	7,485,174	363,641	3,636	11,018	356,259	43,964	79,637	479,861	23,993	2.34
Marianna Jackson County Floridan (FL)	30,040	128	1	4	125	15	28	169	8	0.21
Meibourne Florida Today	637,030	15,718	157	476	15,399	1,900	3,442	20,741	1,037	1.19
Miami Diario Las Americas (FL)	414,792	2,500	25	76	2,449	302	548	3,299	165	0.29
Miami El Nuevo Herald (FL)	632,594	26,543	265	804	26,004	3,209	5,813	35,026	1,751	2.02
Miami Herald	2,394,267	100,462	1,005	3,044	98,423	12,146	22,001	132,570	6,628	2.02
Mobile Register	680,840	16,318	163	494	15,987	1,973	3,574	21,533	1,077	1.16
Naples News	384,115	9,414	94	285	9,223	1,138	2,062	12,423	621	1.18
New Smyrna Beach Observer (FL)	20,000	300	3	9	294	36	66	396	20	0.72
New York Daily News	5,011,657	169,533	1,695	5,137	166,091	20,497	37,128	223,715	11,186	1.63
New York Post	2,938,061	49,439	494	1,498	48,435	5,977	10,827	65,240	3,262	0.81
Ocala Star-Banner	351,268	6,474	65	196	6,343	783	1,418	8,543	427	0.89
Okeechobee News (FL)	22,323	335	3	10	328	40	73	442	22	0.72
Orlando Sentinel	1,947,708	83,752	838	2,538	82,052	10,126	18,342	110,519	5,526	2.07
Palatka News	57,205	780	8	24	764	94	171	1,029	51	0.66
Palm Beach News (FL)	44,261	332	3	10	325	40	73	438	22	0.36
Panama City News-Herald	239,082	4,739	47	144	4,642	573	1,038	6,253	313	0.96
Pensacola News Journal	458,872	7,523	75	228	7,370	910	1,648	9,927	496	0.79
Sanford Herald (FL)	18,685	500	5	15	490	60	110	660	33	1.29

Newspaper	Weekly Circulation (Total Issues) (1)	Newsprint consumption (purchases) (2) tons	Adjustment for ink (3) tons	Adjustment for pressroom scrap (4) tons	Adjusted newsprint consumption (5) tons	Inserts on newsprint (6) tons	Inserts on groundwood newspapers (7) tons	Total daily newspapers (8) tons	Overissue daily newspapers (9) tons	Pounds/Issue (10) lbs
Sebring Highlands Today (FL)	116,263	1,150	12	35	1,127	139	252	1,518	76	0.52
St Augustine Record	107,457	77,079	771	2,335	75,514	9,319	16,880	101,713	5,086	1.65
St Louis Post-Dispatch	2,253,849	73,575	736	2,229	72,081	8,895	16,113	97,090	4,854	1.50
St Petersburg Times	2,363,554	20,453	205	620	20,038	2,473	4,479	26,990	1,349	1.29
Sarasota Herald-Tribune	762,036	7,448	74	226	7,297	901	1,631	9,829	491	1.34
Stuart News	269,012	363,721	84	256	8,277	1,021	1,850	11,149	557	1.12
Tallahassee Democrat	1,654,852	69,322	693	2,100	67,915	8,381	15,182	91,477	4,574	2.02
Tampa Tribune	134,954	1,500	15	45	1,470	181	329	1,979	99	0.54
Valdosta Times	231,551	4,380	44	133	4,292	530	959	5,780	289	0.91
Vero Beach Press-Journal	5,587,502	250,000	2,500	7,575	244,925	30,225	54,750	329,900	16,495	2.16
Washington Post	1,252,380	43,380	434	1,314	42,499	5,245	9,500	57,244	2,862	1.67
West Palm Beach Post	70,469	2,150	22	65	2,106	260	471	2,837	142	1.47
Winter Haven News-Chief	8,937,442	165,300	1,653	5,009	161,944	19,985	36,201	218,130	10,906	0.89
USA Today	8,813,755									
Wall Street Journal										

(1) From Editor & Publisher International Yearbook, 2001. Includes weekday, Saturday, and Sunday editions. Does not include overissue newspapers.

(2) As reported in Editor & Publisher Year Book.

(3) Calculated at 1% of newsprint consumption based on average of reported purchases.

(4) Calculated at 3% of (2) + (3).

(5) (2) + (3) - (4).

(6) Factor of 12.09% of newsprint consumption in daily papers derived from reports for EPA, AF&PA, and confidential projects.

(7) Factor of 21.9% of newsprint in daily newspapers (including preprints) derived from reports for EPA, AF&PA, and confidential projects.

(8) (5) + (6) + (7).

(9) Calculated at 5% of total daily newspapers.

(10) [(8) - (9)] x 2000 ÷ [(1) x 52].

Source: Franklin Associates.

Data Table
CALCULATION OF WEIGHT OF NEWSPAPERS IN FLORIDA, 2000

Enter data into columns E and G.
 Table will update automatically.

Newspaper	U.S. Weekly Circulation (Total Issues) (1)	Daily newspapers							Overissue daily newspapers (9) tons	Pounds/ Issue (10) lbs
		Newsprint consumption (purchases) (2) tons	Adjust- ment for ink (3) tons	Adjustment for pressroom scrap (4) tons	Adjusted newsprint consumption (5) tons	Inserts on newsprint (6) tons	Inserts on groundwood newspapers (7) tons	Total daily newspapers (8) tons		
Atlanta Journal, Constitution	2,953,589	128,250	1,283	3,886	125,647	15,505	28,087	169,239	8,462	2.09
Boca Raton News	96,377	3,162	32	96	3,097	382	692	4,172	209	1.58
Boston Globe	3,499,089	130,000	1,300	3,939	127,361	15,717	28,470	171,548	8,577	1.79
Boston Herald	1,651,980	49,613	496	1,503	48,605	5,998	10,865	65,469	3,273	1.45
Bradenton Herald	310,450	6,129	61	186	6,005	741	1,342	8,088	404	0.95
Brooksville Hernando Today (FL)	113,113	848	8	26	831	103	186	1,119	56	0.36
Cape Coral Breeze (FL)	11,130	210	2	6	206	25	46	277	14	0.91
Charlotte Harbor Sun-Herald	241,323	4,000	40	121	3,919	484	876	5,278	264	0.80
Chicago Sun-Times	3,060,184	126,730	1,267	3,840	124,157	15,322	27,754	167,233	8,362	2.00
Chicago Tribune	4,659,784	220,400	2,204	6,678	215,926	26,646	48,268	290,840	14,542	2.28
Crystal River Citrus County Chronicle	173,288	1,200	12	36	1,176	145	263	1,584	79	0.33
Daytona Beach News-Journal	720,683	15,598	156	473	15,281	1,886	3,416	20,583	1,029	1.04
Fort Lauderdale Sun-Sentinel	1,910,019	88,756	888	2,689	86,954	10,731	19,438	117,122	5,856	2.24
Fort Myers News-Press	633,107	22,060	221	668	21,612	2,667	4,831	29,110	1,456	1.68
Fort Pierce/Port St. Lucie Tribune	192,998	2,965	30	90	2,905	359	649	3,913	196	0.74
Fort Walton Beach Northwest Florida News	281,112	3,000	30	91	2,939	363	657	3,959	198	0.51
Gainesville Sun (FL)	370,040	9,414	94	285	9,223	1,138	2,062	12,423	621	1.23
Jacksonville Times Union (FL)	1,270,513	32,322	323	979	31,666	3,908	7,079	42,653	2,133	1.23
Key West Citizen	61,129	399	4	12	391	48	87	527	26	0.31
Lake City Reporter	49,490	484	5	15	474	58	106	638	32	0.47
Lakeland Ledger	536,731	16,332	163	495	16,001	1,975	3,577	21,552	1,078	1.47
Leesburg Commercial	206,081	3,780	38	115	3,703	457	828	4,988	249	0.88
Los Angeles Times	7,485,174	363,641	3,636	11,018	356,259	43,964	79,637	479,861	23,993	2.34
Marianna Jackson County Floridan (FL)	30,040	128	1	4	125	15	28	169	8	0.21
Melbourne Florida Today	637,030	15,718	157	476	15,399	1,900	3,442	20,741	1,037	1.19
Miami Diario Las Americas (FL)	414,792	2,500	25	76	2,449	302	548	3,299	165	0.29
Miami El Nuevo Herald (FL)	632,594	26,543	265	804	26,004	3,209	5,813	35,026	1,751	2.02
Miami Herald	2,394,267	100,462	1,005	3,044	98,423	12,146	22,001	132,570	6,628	2.02
Mobile Register	680,840	16,318	163	494	15,987	1,973	3,574	21,533	1,077	1.16
Naples News	384,115	9,414	94	285	9,223	1,138	2,062	12,423	621	1.18
New Smyrna Beach Observer (FL)	20,000	300	3	9	294	36	66	396	20	0.72
New York Daily News	5,011,657	169,533	1,695	5,137	166,091	20,497	37,128	223,715	11,186	1.63
New York Post	2,938,061	49,439	494	1,498	48,435	5,977	10,827	65,240	3,262	0.81
Ocala Star-Banner	351,268	6,474	65	196	6,343	783	1,418	8,543	427	0.89
Okeechobee News (FL)	22,323	335	3	10	328	40	73	442	22	2.07
Orlando Sentinel	1,947,708	83,752	838	2,538	82,052	10,126	18,342	110,519	5,526	2.02
Palatka News	57,205	780	8	24	764	94	171	1,029	51	0.66
Palm Beach News (FL)	44,261	332	3	10	325	40	73	438	22	0.36
Panama City News-Herald	239,082	4,739	47	144	4,642	573	1,038	6,253	313	0.96

Pensacola News Journal	458,872	7,523	75	228	7,370	910	1,648	9,927	496	0.79
Sanford Herald (FL)	18,685	500	e	15	490	60	110	660	33	1.29
Sebring Highlands Today (FL)	116,263	872	e	26	854	105	191	1,151	58	0.36
St Augustine Record	107,457	1,150	12	35	1,127	139	252	1,518	76	0.52
St Louis Post-Dispatch	2,253,849	77,079	771	2,335	75,514	9,319	16,880	101,713	5,086	1.65
St Petersburg Times	2,363,554	73,575	736	2,229	72,081	8,895	16,113	97,090	4,854	1.50
Sarasota Herald-Tribune	762,036	20,453	205	620	20,038	2,473	4,479	26,990	1,349	1.29
Stuart News	269,012	7,448	74	226	7,297	901	1,631	9,829	491	1.34
Tallahassee Democrat	363,721	8,449	84	256	8,277	1,021	1,850	11,149	557	1.12
Tampa Tribune	1,654,852	69,322	693	2,100	67,915	8,381	15,182	91,477	4,574	2.02
Valdosta Times	134,954	1,500	15	45	1,470	181	329	1,979	99	0.54
Vero Beach Press-Journal	231,551	4,380	44	133	4,292	530	959	5,780	289	0.91
Washington Post	5,587,502	250,000	2,500	7,575	244,925	30,225	54,750	329,900	16,495	2.16
West Palm Beach Post	1,252,380	43,380	434	1,314	42,499	5,245	9,500	57,244	2,862	1.67
Winter Haven News-Chief	70,469	2,150	22	65	2,106	260	471	2,837	142	1.47
USA Today	8,937,442	165,300	1,653	5,009	161,944	19,985	36,201	218,130	10,906	0.89
Wall Street Journal	8,813,755									

(1) From Editor & Publishers International Yearbook, 2001. Includes weekday, Saturday, and Sunday editions. Does not include overissue newspapers.

(2) As reported in Editor & Publisher Year Book.

(3) Calculated at 1% of newsprint consumption based on average of reported purchases.

(4) Calculated at 3% of (2) + (3).

(5) (2) + (3) - (4)

(6) Factor of 12.09% of newsprint consumption in daily papers derived from reports for EPA, AF&PA, and confidential projects.

(7) Factor of 21.9% of newsprint in daily newspapers (including preprints) derived from reports for EPA, AF&PA, and confidential projects.

(8) (5) + (6) + (7).

(9) Calculated at 5% of total daily newspapers.

(10) [(8) - (9)] x 2000 + [(1) x 52].

Source: Franklin Associates.

Table 4 - NEWSPAPER (ONP) AND CORRUGATED (OCC) MOISTURE ADJUSTMENT

County - sorted by population density	Calculated ONP (1) (tons)	Moisture Adj. ONP (2) (tons)	Calculated OCC (3) (tons)	Moisture Adj. OCC (2) (tons)
Pinellas	78,743	94,373	138,705	166,238
Broward	129,047	154,663	217,552	260,736
Seminole	22,206	26,614	48,606	58,254
Miami-Dade	227,908	273,147	307,202	368,181
Duval	29,307	35,125	130,038	155,851
Orange	51,405	61,608	196,265	235,224
Hillsborough	67,247	80,595	175,372	210,184
Palm Beach	87,801	105,229	155,425	186,276
Sarasota	20,507	24,578	48,731	58,404
Lee	30,729	36,829	55,831	66,913
Brevard	25,964	31,118	59,847	71,727
Pasco	26,231	31,438	26,938	32,285
Escambia	7,467	8,949	41,483	49,718
Volusia	28,368	33,998	50,696	60,759
Leon	9,683	11,606	35,974	43,115
Manatee	14,162	16,973	36,390	43,613
St. Lucie	9,267	11,107	16,353	19,599
Hernando	10,985	13,165	10,189	12,212
Polk	29,701	35,597	60,870	72,953
Alachua	10,347	12,401	31,511	37,766
Clay	4,362	5,228	14,863	17,813
Martin	10,633	12,744	17,283	20,714
Indian River	6,892	8,260	15,446	18,512
Lake	18,279	21,907	20,694	24,802
Charlotte	8,530	10,223	12,840	15,388
Citrus	6,313	7,566	9,350	11,207
St. Johns	4,547	5,449	14,029	16,814
Bay	5,668	6,793	22,598	27,084
Okaloosa	3,749	4,493	25,081	30,059
Marion	10,494	12,577	27,550	33,019
Osceola	8,014	9,605	20,006	23,977
Collier	11,687	14,007	34,304	41,114
Santa Rosa	2,580	3,092	8,368	10,029
Flagler	2,195	2,631	3,977	4,766
Sumter	2,201	2,638	2,246	2,692
Putnam	2,166	2,596	5,728	6,865
Bradford	623	747	1,727	2,069
Nassau	1,626	1,948	5,473	6,560
Gadsden	1,091	1,307	3,040	3,644
Highlands	5,162	6,187	8,206	9,835
Monroe	3,610	4,326	15,171	18,182
Columbia	1,533	1,838	6,245	7,484
Union	275	330	447	536
Jackson	510	611	3,754	4,499
Suwannee	638	765	3,075	3,686
De Soto	966	1,158	2,228	2,670
Okeechobee	1,523	1,826	3,519	4,218

Hardee	714	856	1,866	2,236
Gilchrist	337	404	501	600
Holmes	101	121	811	972
Walton	488	585	3,410	4,087
Baker	392	470	1,315	1,576
Wakulla	448	537	1,070	1,283
Washington	304	364	1,480	1,774
Hendry	904	1,083	3,766	4,514
Levy	1,028	1,232	2,483	2,976
Madison	234	280	1,502	1,800
Hamilton	169	202	809	970
Gulf	291	349	807	968
Calhoun	154	185	975	1,168
Jefferson	264	316	740	887
Franklin	250	300	962	1,153
Dixie	335	402	632	758
Taylor	217	260	1,132	1,356
Glades	14	16	298	357
Lafayette	91	109	305	366
Liberty	102	122	266	319
			2,176,358	2,608,365

ONP: Updated to 2000

OCC: All are 1998 (most recent year data is available).

(1) Tables 2 and 3.

(2) Assumed added moisture of 27.85% and inherent moisture of 8%.

(3) Table 5.

**Table 5 - OCC GENERATION
Employment in Selected Categories**

		Florida (1998)					
		Employment	Factor	Tons	Employment	Factor	Tons
		486,646	1.14	101,247			
		333,741	2	121,815			
		1,302,350	4.28	1,017,266			
		413,557	0.429	32,378			
		434,064	3.14	248,740			
		147,358	1.43	38,457			
		141,473	2.14	55,252			
		3,259,189					
		2,241,060	1.374	561,957			
		5,500,249		2,177,113			
				Florida MSW Study (1998)			2,177,118

		Alachua (1998)			Baker (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	5,382	1.14	1,120	251	1.14	52
50-51	Wholesale	2,216	2	809	70	2	26
52-59	Retail	20,980	4.28	16,387	1,019	4.28	796
60-67	Finance	5,015	0.429	393	133	0.429	10
58	Restaurants	8,012	3.14	4,591	322	3.14	185
70	Lodging	1,291	1.43	337	0	1.43	0
79	Recreation	1,604	2.14	626	0	2.14	0
Subtotal		44,500			1,795		
Other		28,904	1.374	7,248	982	1.374	246
Total		73404		31,511	2777		1,315

		Bay (1998)			Bradford (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	3,954	1.14	823	652	1.14	136
50-51	Wholesale	2,343	2	855	332	2	121
52-59	Retail	15,758	4.28	12,309	1,245	4.28	972
60-67	Finance	3,461	0.429	271	231	0.429	18
58	Restaurants	6,534	3.14	3,744	438	3.14	251
70	Lodging	2,272	1.43	593	0	1.43	0
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		34,322			2,898		
Other		15,965	1.374	4,003	910	1.374	228
Total		50287		22,598	3808		1,727

		Brevard (1998)			Broward (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	26,737	1.14	5,563	40,026	1.14	8,327
50-51	Wholesale	5,225	2	1,907	38,468	2	14,041
52-59	Retail	36,710	4.28	28,674	137,536	4.28	107,429
60-67	Finance	6,043	0.429	473	46,309	0.429	3,626
58	Restaurants	12,792	3.14	7,330	43,737	3.14	25,063
70	Lodging	2,575	1.43	672	8,847	1.43	2,309
79	Recreation	1,813	2.14	708	11,598	2.14	4,530

Subtotal		91,895			326,521		
Other		57,903	1.374	14,519	208,279	1.374	52,227
Total		149,798		59,847	534,800		217,552

		Calhoun (1998)			Charlotte (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	234	1.14	49	1,005	1.14	209
50-51	Wholesale	128	2	47	660	2	241
52-59	Retail	585	4.28	457	9,489	4.28	7,412
60-67	Finance	81	0.429	6	1,597	0.429	125
58	Restaurants	156	3.14	89	2,470	3.14	1,415
70	Lodging	0	1.43	0	319	1.43	83
79	Recreation	0	2.14	0	625	2.14	244
Subtotal		1,184			16,165		
Other		1,303	1.374	327	12,403	1.374	3,110
Total		2,487		975	28,568		12,840

		Citrus (1998)			Clay (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	1,327	1.14	276	1,856	1.14	386
50-51	Wholesale	475	2	173	860	2	314
52-59	Retail	6,425	4.28	5,019	11,382	4.28	8,890
60-67	Finance	1,152	0.429	90	909	0.429	71
58	Restaurants	1,790	3.14	1,026	4,103	3.14	2,351
70	Lodging	466	1.43	122	409	1.43	107
79	Recreation	446	2.14	174	977	2.14	382
Subtotal		12,081			20,496		
Other		9,853	1.374	2,471	9,417	1.374	2,361
Total		21,934		9,350	29,913		14,863

		Collier (1998)			Columbia (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	2,661	1.14	554	2,099	1.14	437
50-51	Wholesale	2,755	2	1,006	1,024	2	374
52-59	Retail	21,451	4.28	16,755	4,401	4.28	3,438
60-67	Finance	5,524	0.429	432	510	0.429	40
58	Restaurants	6,589	3.14	3,776	1,414	3.14	810
70	Lodging	4,236	1.43	1,105	377	1.43	98
79	Recreation	3,607	2.14	1,409	167	2.14	65
Subtotal		46,823			9,992		
Other		36,958	1.374	9,267	3,920	1.374	983
Total		83,781		34,304	13,912		6,245

		De Soto (1998)			Dixie (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	193	1.14	40	550	1.14	114
50-51	Wholesale	237	2	87	64	2	23
52-59	Retail	1,130	4.28	883	418	4.28	326
60-67	Finance	173	0.429	14	47	0.429	4
58	Restaurants	291	3.14	167	163	3.14	93
70	Lodging	52	1.43	14	6	1.43	2

79	Recreation	<u>89</u>	2.14	<u>35</u>	<u>0</u>	2.14	<u>0</u>
Subtotal		<u>2,165</u>			<u>1,248</u>		
Other		<u>3,949</u>	1.374	<u>990</u>	<u>277</u>	1.374	<u>69</u>
Total		<u>6114</u>		<u>2,228</u>	<u>1525</u>		<u>632</u>

		<u>Duval (1998)</u>			<u>Escambia (1998)</u>		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	31,063	1.14	6,463	8,260	1.14	1,718
50-51	Wholesale	25,787	2	9,412	5,364	2	1,958
52-59	Retail	73,021	4.28	57,037	26,432	4.28	20,646
60-67	Finance	50,842	0.429	3,981	5,070	0.429	397
58	Restaurants	23,036	3.14	13,201	10,076	3.14	5,774
70	Lodging	3,177	1.43	829	989	1.43	258
79	Recreation	<u>3,029</u>	2.14	<u>1,183</u>	<u>1,138</u>	2.14	<u>444</u>
Subtotal		<u>209,955</u>			<u>57,329</u>		
Other		<u>151,276</u>	1.374	<u>37,933</u>	<u>41,026</u>	1.374	<u>10,287</u>
Total		<u>361231</u>		<u>130,038</u>	<u>98355</u>		<u>41,483</u>

		<u>Flagler (1998)</u>			<u>Franklin (1998)</u>		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	1,508	1.14	314	144	1.14	30
50-51	Wholesale	188	2	69	155	2	57
52-59	Retail	2,655	4.28	2,074	708	4.28	553
60-67	Finance	427	0.429	33	181	0.429	14
58	Restaurants	943	3.14	540	307	3.14	176
70	Lodging	413	1.43	108	127	1.43	33
79	Recreation	<u>125</u>	2.14	<u>49</u>	<u>0</u>	2.14	<u>0</u>
Subtotal		<u>6,259</u>			<u>1,622</u>		
Other		<u>3,152</u>	1.374	<u>790</u>	<u>396</u>	1.374	<u>99</u>
Total		<u>9411</u>		<u>3,977</u>	<u>2018</u>		<u>962</u>

		<u>Gadsden (1998)</u>		
SIC		Employment	Factor	Tons
20-39	Manufact.	1,718	1.14	357
50-51	Wholesale	329	2	120
52-59	Retail	1,786	4.28	1,395
60-67	Finance	211	0.429	17
58	Restaurants	435	3.14	249
70	Lodging	31	1.43	8
79	Recreation	<u>18</u>	2.14	<u>7</u>
Subtotal		<u>4,528</u>		
Other		<u>3,537</u>	1.374	<u>887</u>
Total		<u>8065</u>		<u>3,040</u>

		<u>Gilchrist (1998)</u>			<u>Glades (1998)</u>		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	173	1.14	36	0	1.14	0
50-51	Wholesale	69	2	25	0	2	0
52-59	Retail	284	4.28	222	147	4.28	115
60-67	Finance	32	0.429	3	12	0.429	1
58	Restaurants	73	3.14	42	73	3.14	42

70	Lodging	63	1.43	16	29	1.43	8
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		694			261		
Other		625	1.374	157	529	1.374	133
Total		1319		501	790		298

		Gulf (1998)			Hamilton (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	580	1.14	121	0	1.14	0
50-51	Wholesale	60	2	22	29	2	11
52-59	Retail	465	4.28	363	351	4.28	274
60-67	Finance	133	0.429	10	29	0.429	2
58	Restaurants	80	3.14	46	76	3.14	44
70	Lodging	0	1.43	0	24	1.43	6
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		1,318			509		
Other		978	1.374	245	1,884	1.374	472
Total		2296		807	2393		809

		Hardee (1998)			Hendry (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	251	1.14	52	1,049	1.14	218
50-51	Wholesale	236	2	86	350	2	128
52-59	Retail	848	4.28	662	1,801	4.28	1,407
60-67	Finance	242	0.429	19	245	0.429	19
58	Restaurants	192	3.14	110	496	3.14	284
70	Lodging	11	1.43	3	123	1.43	32
79	Recreation	17	2.14	7	15	2.14	6
Subtotal		1,797			4,079		
Other		3,696	1.374	927	6,669	1.374	1,672
Total		5493		1,866	10748		3,766

		Hernando (1998)			Highlands (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	1,375	1.14	286	1,225	1.14	255
50-51	Wholesale	925	2	338	565	2	206
52-59	Retail	7,673	4.28	5,993	4,757	4.28	3,716
60-67	Finance	1,880	0.429	147	676	0.429	53
58	Restaurants	2,401	3.14	1,376	1,178	3.14	675
70	Lodging	141	1.43	37	178	1.43	46
79	Recreation	566	2.14	221	350	2.14	137
Subtotal		14,961			8,929		
Other		7,144	1.374	1,791	12,435	1.374	3,118
Total		22105		10,189	21364		8,206

		Hillsborough (1998)			Holmes (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	37,501	1.14	7,802	358	1.14	74
50-51	Wholesale	35,279	2	12,877	66	2	24
52-59	Retail	89,630	4.28	70,010	513	4.28	401
60-67	Finance	45,234	0.429	3,541	64	0.429	5

58	Restaurants	31,350	3.14	17,965	198	3.14	113
70	Lodging	6,319	1.43	1,649	0	1.43	0
79	Recreation	9,398	2.14	3,670	15	2.14	6
Subtotal		254,711			1,214		
Other		230,733	1.374	57,857	749	1.374	188
Total		485,444		175,372	1,963		811

		Indian River (1998)			Jackson (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	2,629	1.14	547	1,258	1.14	262
50-51	Wholesale	1,315	2	480	656	2	239
52-59	Retail	10,183	4.28	7,954	2,858	4.28	2,232
60-67	Finance	2,018	0.429	158	321	0.429	25
58	Restaurants	2,896	3.14	1,660	790	3.14	453
70	Lodging	574	1.43	150	119	1.43	31
79	Recreation	1,687	2.14	659	79	2.14	31
Subtotal		21,302			6,081		
Other		15,311	1.374	3,839	1,917	1.374	481
Total		36,613		15,446	7,998		3,754

		Jefferson (1998)			Lafayette (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	168	1.14	35	199	1.14	41
50-51	Wholesale	72	2	26	73	2	27
52-59	Retail	515	4.28	402	125	4.28	98
60-67	Finance	132	0.429	10	0	0.429	0
58	Restaurants	85	3.14	49	0	3.14	0
70	Lodging	0	1.43	0	0	1.43	0
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		972			397		
Other		868	1.374	218	557	1.374	140
Total		1,840		740	954		305

		Lake (1998)			Lee (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	4,632	1.14	964	6,968	1.14	1,450
50-51	Wholesale	1,759	2	642	5,333	2	1,947
52-59	Retail	13,319	4.28	10,403	38,415	4.28	30,006
60-67	Finance	4,100	0.429	321	8,667	0.429	679
58	Restaurants	3,753	3.14	2,151	12,417	3.14	7,116
70	Lodging	870	1.43	227	4,277	1.43	1,116
79	Recreation	536	2.14	209	2,574	2.14	1,005
Subtotal		28,969			78,651		
Other		23,037	1.374	5,777	49,901	1.374	12,513
Total		52,006		20,694	128,552		55,831

		Leon (1998)			Levy (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	3,099	1.14	645	392	1.14	82
50-51	Wholesale	3,575	2	1,305	192	2	70
52-59	Retail	24,241	4.28	18,935	1,837	4.28	1,435

60-67	Finance	5,830	0.429	456	223	0.429	17
58	Restaurants	8,704	3.14	4,988	534	3.14	306
70	Lodging	1,237	1.43	323	90	1.43	23
79	Recreation	900	2.14	351	51	2.14	20
Subtotal		47,586			3,319		
Other		35,776	1.374	8,971	2,113	1.374	530
Total		83362		35,974	5432		2,483

		Liberty (1998)			Madison (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	248	1.14	52	1,182	1.14	246
50-51	Wholesale	0	2	0	113	2	41
52-59	Retail	132	4.28	103	940	4.28	734
60-67	Finance	0	0.429	0	68	0.429	5
58	Restaurants	0	3.14	0	213	3.14	122
70	Lodging	0	1.43	0		1.43	0
79	Recreation	0	2.14	0	29	2.14	11
Subtotal		380			2,545		
Other		443	1.374	111	1,364	1.374	342
Total		823		266	3909		1,502

		Manatee (1998)			Marion (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	12,870	1.14	2,678	11,525	1.14	2,398
50-51	Wholesale	3,424	2	1,250	3,484	2	1,272
52-59	Retail	18,373	4.28	14,351	18,838	4.28	14,714
60-67	Finance	3,118	0.429	244	3,725	0.429	292
58	Restaurants	5,611	3.14	3,215	5,259	3.14	3,014
70	Lodging	709	1.43	185	876	1.43	229
79	Recreation	1,093	2.14	427	949	2.14	371
Subtotal		45,198			44,656		
Other		55,990	1.374	14,040	20,983	1.374	5,262
Total		101188		36,390	65639		27,550

		Martin (1998)			Miami-Dade (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	3,340	1.14	695	72,653	1.14	15,115
50-51	Wholesale	1,226	2	447	76,947	2	28,086
52-59	Retail	10,904	4.28	8,517	170,016	4.28	132,799
60-67	Finance	2,484	0.429	194	65,702	0.429	5,144
58	Restaurants	3,387	3.14	1,941	53,566	3.14	30,696
70	Lodging	681	1.43	178	19,250	1.43	5,024
79	Recreation	1,925	2.14	752	11,658	2.14	4,553
Subtotal		23,947			469,792		
Other		18,179	1.374	4,558	342,104	1.374	85,784
Total		42126		17,283	811896		307,202

		Monroe (1998)			Nassau (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	602	1.14	125	2,142	1.14	446
50-51	Wholesale	757	2	276	292	2	107

52-59	Retail	10,926	4.28	8,534	3,691	4.28	2,883
60-67	Finance	1,509	0.429	118	406	0.429	32
58	Restaurants	4,996	3.14	2,863	1,424	3.14	816
70	Lodging	5,742	1.43	1,499	1,732	1.43	452
79	Recreation	1,048	2.14	409	95	2.14	37
Subtotal		25,580			9,782		
Other		5,367	1.374	1,346	2,796	1.374	701
Total		30947		15,171	12578		5,473

		Okaloosa (1998)			Okeechobee (1998)		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	3,838	1.14	798	172	1.14	36
50-51	Wholesale	1,245	2	454	477	2	174
52-59	Retail	17,475	4.28	13,650	2,241	4.28	1,750
60-67	Finance	3,921	0.429	307	252	0.429	20
58	Restaurants	6,717	3.14	3,849	650	3.14	372
70	Lodging	990	1.43	258	122	1.43	32
79	Recreation	1,026	2.14	401	84	2.14	33
Subtotal		35,212			3,998		
Other		21,387	1.374	5,363	4,394	1.374	1,102
Total		56599		25,081	8392		3,519

		Orange (1998)			Osceola (1998)		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	36,845	1.14	7,666	1,681	1.14	350
50-51	Wholesale	31,762	2	11,593	1,864	2	680
52-59	Retail	96,297	4.28	75,218	14,689	4.28	11,474
60-67	Finance	32,825	0.429	2,570	2,447	0.429	192
58	Restaurants	39,422	3.14	22,591	6,700	3.14	3,839
70	Lodging	40,151	1.43	10,478	5,857	1.43	1,529
79	Recreation	50,596	2.14	19,760	943	2.14	368
Subtotal		327,898			34,181		
Other		185,000	1.374	46,390	6,279	1.374	1,574
Total		512898		196,265	40460		20,006

		Palm Beach (1998)			Pasco (1998)		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	30,638	1.14	6,374	3,731	1.14	776
50-51	Wholesale	21,821	2	7,965	1,969	2	719
52-59	Retail	92,112	4.28	71,949	19,070	4.28	14,896
60-67	Finance	32,050	0.429	2,509	2,935	0.429	230
58	Restaurants	30,344	3.14	17,389	5,815	3.14	3,332
70	Lodging	9,438	1.43	2,463	1,217	1.43	318
79	Recreation	11,790	2.14	4,605	807	2.14	315
Subtotal		228,193			35,544		
Other		168,178	1.374	42,171	25,335	1.374	6,353
Total		396371		155,425	60879		26,938

		Pinellas (1998)			Polk (1998)		
SIC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	46,171	1.14	9,606	20,577	1.14	4,281

50-51	Wholesale	20,569	2	7,508	8,360	2	3,051
52-59	Retail	79,237	4.28	61,892	39,609	4.28	30,939
60-67	Finance	29,077	0.429	2,277	8,066	0.429	632
58	Restaurants	26,217	3.14	15,024	9,603	3.14	5,503
70	Lodging	7,033	1.43	1,835	1,871	1.43	488
79	Recreation	5,035	2.14	1,966	2,247	2.14	878
Subtotal		213,339			90,333		
Other		153,924	1.374	38,597	60,212	1.374	15,098
Total		367,263		138,705	150,545		60,870

SIC		Putnam (1998)			Santa Rosa (1998)		
		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	3,370	1.14	701	2,164	1.14	450
50-51	Wholesale	473	2	173	481	2	176
52-59	Retail	3,688	4.28	2,881	5,542	4.28	4,329
60-67	Finance	533	0.429	42	769	0.429	60
58	Restaurants	1,264	3.14	724	1,832	3.14	1,050
70	Lodging	134	1.43	35	189	1.43	49
79	Recreation	40	2.14	16	330	2.14	129
Subtotal		9,502			11,307		
Other		4,612	1.374	1,156	8,475	1.374	2,125
Total		14,114		5,728	19,782		8,368

SIC		Sarasota (1998)			Seminole (1998)		
		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	8,000	1.14	1,664	10,461	1.14	2,176
50-51	Wholesale	4,559	2	1,664	7,577	2	2,766
52-59	Retail	31,872	4.28	24,895	32,766	4.28	25,594
60-67	Finance	8,406	0.429	658	6,463	0.429	506
58	Restaurants	10,533	3.14	6,036	9,870	3.14	5,656
70	Lodging	2,132	1.43	556	966	1.43	252
79	Recreation	3,988	2.14	1,558	1,820	2.14	711
Subtotal		69,490			69,923		
Other		46,657	1.374	11,699	43,650	1.374	10,945
Total		116,147		48,731	113,573		48,606

SIC		St. Johns (1998)			St. Lucie (1998)		
		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	4,102	1.14	853	2,604	1.14	542
50-51	Wholesale	1,321	2	482	1,900	2	694
52-59	Retail	9,296	4.28	7,261	10,322	4.28	8,063
60-67	Finance	1,346	0.429	105	2,260	0.429	177
58	Restaurants	3,900	3.14	2,235	3,145	3.14	1,802
70	Lodging	2,500	1.43	652	779	1.43	203
79	Recreation	1,386	2.14	541	404	2.14	158
Subtotal		23,851			21,414		
Other		7,570	1.374	1,898	18,804	1.374	4,715
Total		31,421		14,029	40,218		16,353

SIC	Sumter (1998)			Suwannee (1998)		
	Employment	Factor	Tons	Employment	Factor	Tons

20-39	Manufact.	852	1.14	177	0	1.14	0
50-51	Wholesale	360	2	131	335	2	122
52-59	Retail	1,586	4.28	1,239	1,935	4.28	1,511
60-67	Finance	170	0.429	13	270	0.429	21
58	Restaurants	468	3.14	268	463	3.14	265
70	Lodging	98	1.43	26	36	1.43	9
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		<u>3,534</u>		<u>1,774</u>	<u>3,039</u>		<u>1,849</u>
Other		<u>1,560</u>	1.374	<u>391</u>	<u>4,569</u>	1.374	<u>1,146</u>
Total		<u>5094</u>		<u>2,246</u>	<u>7608</u>		<u>3,075</u>

		Taylor (1998)			Union (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	1,894	1.14	394	226	1.14	47
50-51	Wholesale	175	2	64	15	2	5
52-59	Retail	1,138	4.28	889	209	4.28	163
60-67	Finance	147	0.429	12	24	0.429	2
58	Restaurants	333	3.14	191	0	3.14	0
70	Lodging	72	1.43	19	0	1.43	0
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		<u>3,759</u>		<u>1,409</u>	<u>474</u>		<u>177</u>
Other		<u>1,269</u>	1.374	<u>318</u>	<u>915</u>	1.374	<u>229</u>
Total		<u>5028</u>		<u>1,886</u>	<u>1389</u>		<u>447</u>

		Volusia (1998)			Wakulla (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	11,357	1.14	2,363	0	1.14	0
50-51	Wholesale	4,686	2	1,710	76	2	28
52-59	Retail	34,300	4.28	26,792	696	4.28	544
60-67	Finance	6,114	0.429	479	151	0.429	12
58	Restaurants	11,952	3.14	6,849	257	3.14	147
70	Lodging	3,772	1.43	984	0	1.43	0
79	Recreation	2,756	2.14	1,076	0	2.14	0
Subtotal		<u>74,937</u>		<u>33,453</u>	<u>1,180</u>		<u>730</u>
Other		<u>41,643</u>	1.374	<u>10,442</u>	<u>1,355</u>	1.374	<u>340</u>
Total		<u>116580</u>		<u>50,696</u>	<u>2535</u>		<u>1,070</u>

		Walton (1998)			Washington (1998)		
SiC		Employment	Factor	Tons	Employment	Factor	Tons
20-39	Manufact.	1,049	1.14	218	875	1.14	182
50-51	Wholesale	169	2	62	70	2	26
52-59	Retail	2,347	4.28	1,833	1,010	4.28	789
60-67	Finance	492	0.429	39	73	0.429	6
58	Restaurants	910	3.14	521	309	3.14	177
70	Lodging	1,334	1.43	348	35	1.43	9
79	Recreation	0	2.14	0	0	2.14	0
Subtotal		<u>6,301</u>		<u>2,903</u>	<u>2,372</u>		<u>1,183</u>
Other		<u>1,551</u>	1.374	<u>389</u>	<u>1,163</u>	1.374	<u>292</u>
Total		<u>7852</u>		<u>3,410</u>	<u>3535</u>		<u>1,480</u>

Source: Florida Statistical Abstract 1999. Bureau of Economic and Business Research.
Total county employment Table 6.05 pg 223.

The "Other" category includes employees in agriculture, forestry and fishing; mining; construction; transportation, communications ar

	Generation
U.S. 98	29,760
U.S. 00	30,210
Diff	450
% diff.	1.5%

Enter individual county employment data; Florida state data will update automatically.
Adjust "Other" factor so total matches reported Florida OCC generation.
County factor will update automatically.

instead of using state total in CBP, I used individual county totals
1998 is latest year data is available and since US 98 to 00 only changed 1.5% we assumed 98 quantities for 2000

(Adj. "Other" factor so sum of individual counties matches FL MSW study state total)

2,177,113 5 Diff.
0.0%

####

rd public utilities; services (excluding lodging and recreation) and SIC 99 other.

Table 6 - CONSTRUCTION & DEMOLITION DEBRIS WORKSHEET

Historical data used to estimate distribution of FL study statewide total C&D tonnage (5.9 million tons in 1998); extrapolated to 2000 based on population (pounds/person/yr used as county factor in model)

	1995	1996	1997	1998	Total C&D	FL Center	Extrapolate	population	2000
	Total C&D	Total C&D	Total C&D	Total C&D	Total C&D	Total	to 2000	2000	2000
	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)		lb/pers- on/yr
Alachua	63,120	62,042	59,810	40,313	225,285	60,730	64,710	217,955	594
Baker	1,182	713	549	734	3,178	860	920	22,259	83
Bay	38,634	34,193	102,278	75,195	250,300	67,470	71,890	148,217	970
Bradford	1,631	1,311	908	1,167	5,017	1,350	1,440	26,088	110
Brevard	58,900	82,250	96,216	67,670	305,036	82,230	87,610	476,230	368
Broward	592,290	649,094	608,983	507,271	2,357,638	635,560	677,160	1,623,018	834
Calhoun	466	479	479	279	1,703	460	490	13,017	75
Charlotte	41,529	42,905	57,412	24,378	166,224	44,810	47,740	141,627	674
Citrus	89,918	23,120	14,289	95,267	222,594	60,010	63,940	118,085	1083
Clay	18,240	16,534	19,647	9,016	63,437	17,100	18,220	140,814	259
Collier	77,200	84,460	88,007	110,689	360,356	97,140	103,500	251,377	823
Columbia	11,845	12,610	9,870	9,624	43,949	11,850	12,630	56,513	447
De Soto	2,730	3,138	3,691	1,172	10,731	2,890	3,080	32,209	191
Dixie	858	853	879	7,060	9,650	2,600	2,770	13,827	401
Duval	308,011	333,747	345,402	477,132	1,464,292	394,740	420,580	778,879	1080
Escambia	123,668	127,048	128,407	144,892	524,015	141,260	150,510	294,410	1022
Flagler	11,253	14,208	15,446	27,330	68,237	18,390	19,590	49,832	786
Franklin	10,294	3,012	3,221	2,825	19,352	5,220	5,560	11,057	1006
Gadsden	663	657	688	578	2,586	700	750	45,087	33
Gilchrist	314	343	272	289	1,218	330	350	14,437	48
Glades	357	800	475	302	1,934	520	550	10,576	104
Gulf	3,881	4,468	3,793	3,271	15,413	4,150	4,420	13,332	663
Hamilton	367	404	767	105	1,643	440	470	13,327	71
Hardee	1,726	1,857	811	1,451	5,845	1,580	1,680	26,938	125
Hendry	7,810	7,276	4,367	1,434	20,887	5,630	6,000	36,210	331
Hernando	8,900	8,191	23,647	57,395	98,133	26,450	28,180	130,802	431
Highlands	15,028	16,657	15,029	17,794	64,508	17,390	18,530	87,366	424
Hillsborough	264,652	277,287	293,019	639,370	1,474,328	397,440	423,460	998,948	848
Holmes	504	508	125	514	1,651	450	480	18,564	52
Indian River	42,438	50,490	50,140	40,361	183,429	49,450	52,690	112,947	933
Jackson	10,176	1,046	1,193	1,740	14,155	3,820	4,070	46,755	174
Jefferson	945	951	970	873	3,739	1,010	1,080	12,902	167
Lafayette	191	206	206	270	873	240	260	7,022	74
Lake	22,868	23,195	23,908	98,950	168,921	45,540	48,520	210,528	461
Lee	85,159	40,910	42,154	50,875	219,098	59,060	62,930	440,888	285
Leon	110,626	113,341	115,608	113,699	453,274	122,190	130,190	239,452	1087
Levy	2,099	1,435	2,089	2,442	8,065	2,170	2,310	34,450	134
Liberty	706	499	890	586	2,681	720	770	7,021	219
Madison	1,043	1,308	1,885	1,659	5,895	1,590	1,690	18,733	180
Manatee	166,572	66,824	63,770	55,670	352,836	95,120	101,350	264,002	768
Marion	8,229	13,796	17,504	55,916	95,445	25,730	27,410	258,916	212
Martin	48,463	48,111	53,528	44,071	194,173	52,340	55,770	126,731	880
Miami-Dade	823,455	770,732	797,123	499,985	2,891,295	779,420	830,440	2,253,362	737
Monroe	18,627	22,867	13,437	4,875	59,806	16,120	17,180	79,589	432
Nassau	12,316	6,612	5,215	7,245	31,388	8,460	9,010	57,663	313
Okaloosa	46,751	30,811	41,215	111,145	229,922	61,980	66,040	170,498	775
Okeechobee	3,177	7,618	10,327	18,085	39,207	10,570	11,260	35,910	627
Orange	363,964	485,179	510,743	763,595	2,123,481	572,440	609,910	896,344	1361
Osceola	27,011	23,567	48,765	46,683	146,026	39,360	41,940	172,493	486
Palm Beach	648,862	667,160	670,984	199,192	2,186,198	589,340	627,920	1,131,184	1110

Pasco	55,233	79,384	87,235	199,211	421,063	113,510	120,940	344,765	702
Pinellas	271,213	273,373	288,275	165,457	998,318	269,120	286,740	921,482	622
Polk	101,524	178,427	206,890	224,463	711,304	191,750	204,300	483,924	844
Putnam	16,807	21,061	18,374	12,086	68,328	18,420	19,630	70,423	557
Santa Rosa	15,783	23,140	24,990	99,057	162,970	43,930	46,810	117,743	795
Sarasota	143,526	330,124	106,923	130,428	711,001	191,670	204,220	325,957	1253
Seminole	83,439	98,626	94,857	141,189	418,111	112,710	120,090	365,196	658
St. Johns	34,668	42,407	39,247	75,600	191,922	51,740	55,130	123,135	895
St. Lucie	58,368	58,379	62,699	32,048	211,494	57,010	60,740	192,695	630
Sumter	23,244	12,130	10,247	11,080	56,701	15,290	16,290	53,345	611
Suwanee	3,288	3,966	3,217	2,980	13,451	3,630	3,870	34,844	222
Taylor	1,871	1,927	1,000	727	5,525	1,490	1,590	19,256	116
Union	1,086	948	947	684	3,665	990	1,050	13,442	156
Volusia	187,985	174,291	174,889	245,450	782,615	210,970	224,780	443,343	1014
Wakulla	2,594	2,972	870	916	7,352	1,980	2,110	22,863	92
Walton	724	755	850	66,930	69,259	18,670	19,890	40,601	980
Washington	795	783	904	768	3,250	880	940	20,973	90
	5,201,797	5,489,516	5,492,555	5,851,508	22,035,376	5,940,188	6,329,020	15,984,378	
FL pop 2000				15,982,378					
FL pop 1998				15,000,475		792	792		
1995 - 1998 : State DEP report									

(1) Historical data from FL annual reports for each county (2) The % that each county's tons is of the total for the state is taken times the state total developed by FL Center Study (5.9 million tons) (3) This lb/person/year is in model and adjusted each year by population (4) If new study is done by the state, per person factors should be revised (5) See individual county comments in column K

**Table 7 - U.S. FACTORS
ANNUAL INPUT**

Data Year

2001

U.S. Population (data year)

(1,000)

281,422

**Update
factor for
2001**

U.S. MSW Generation (data year)			U.S. MSW Generation 2001 Florida Categorization			
	(1,000 tons)	lb/person		(1,000 tons)	lb/person	
Durable Goods						
Major Appliances	3,640	25.9	Newspaper	15,030	106.8	1.000
Small Appliances	1,000	7.1	Corrugated boxes	30,210	214.7	1.000
Furniture and Furnishings	7,840	55.7	Office paper	7,530	53.5	1.000
Carpets and Rugs	2,570	18.3	Other papers	33,920	241.1	1.000
Rubber Tires	4,670	33.2	Glass Pkg	11,190	79.5	1.000
Batteries, lead acid	1,940	13.8	Plastic containers	3,590	25.5	1.000
Miscellaneous Durables	14,670	104.3	Other plastics	18,467	131.2	1.000
Total Durable Goods	36,330	258.2	Steel cans	2,640	18.8	1.000
Nondurable Goods			Other ferrous	4,788	34.0	1.000
Newspapers	15,030	106.8	Aluminum cans	1,570	11.2	1.000
Books	1,140	8.1	Other nonferrous	1,327	9.4	1.000
Magazines	2,130	15.1	Textiles	6,858	48.7	1.000
Office Papers	7,530	53.5	Yard waste	27,730	197.1	1.000
Directories	740	5.3	Food waste	25,900	184.1	1.000
Standard (A) Mail	5,570	39.6	Tires	4,670	33.2	1.000
Other Commercial Printing	7,040	50.0	White goods	3,640	25.9	1.000
Tissue Paper and Towels	3,210	22.8	Other Miscellaneous	32,790	233.0	1.000
Paper Plates and Cups	1,040	7.4				
Plastic Plates and Cups	870	6.2	Total MSW	231,850	1,648	
Plastic Trash Bags	850	6.0	C&D Debris	111,443	792	1.000
Disposable Diapers	3,340	23.7	C&D debris generation based on Florida data.			
Other Nonpackaging Paper	3,860	27.4				
Clothing	5,920	42.1				
Footwear	540	3.8				
Towels, Sheets etc	820	5.8				
Other Miscellaneous Nondurables	4,030	28.6				
Total Nondurable Goods	63,660	452.4				
Containers & Packaging						
Glass Packaging						
Beer and SD Bottles	5,860	41.6				
Wine and Liquor Bottles	1,970	14.0				
Food, Other Bottles	3,360	23.9				
Total Glass Packaging	11,190	79.5				
Steel Packaging						
Food and Other Cans	2,640	18.8				
Other Steel Packaging	240	1.7				
Total Steel Packaging	2,880	20.5				
Aluminum Packaging						
Beer and SD Cans	1,520	10.8				
Other Cans	50	0.4				
Foil and Closures	380	2.7				
Total Aluminum Pkg	1,950	13.9				
Paper & Paperboard Pkg						
Corrugated Boxes	30,210	214.7				
Milk Cartons	490	3.5				
Folding Cartons	5,580	39.7				
Other Paperboard Pkg	200	1.4				
Bags and Sacks	1,550	11.0				
Other Paper Packaging	1,370	9.7				

Total Paper & Board Pkg	39,400	280.0
Plastics Packaging		
PET SD Bottles	830	5.9
Other PET Bottles	880	6.3
HDPE Natural Bottles	690	4.9
Other HDPE Bottles	1,190	8.5
Other Containers	560	4.0
Bags and Sacks	1,650	11.7
Wraps	2,550	18.1
Other Plastics Pakg	2,840	20.2
Total Plastics Pakg	11,190	79.5
Wood Packaging	7,880	56.0
Other Misc. Packaging	240	1.7
Total Containers & Pkg	74,730	531.1
Other Wastes		
Food Wastes	25,900	184.1
Yard Trimmings	27,730	197.1
Misc Inorganic Wastes	3,500	24.9
Total Other Wastes	57,130	406.0
Total MSW Generated	231,850	1,647.7